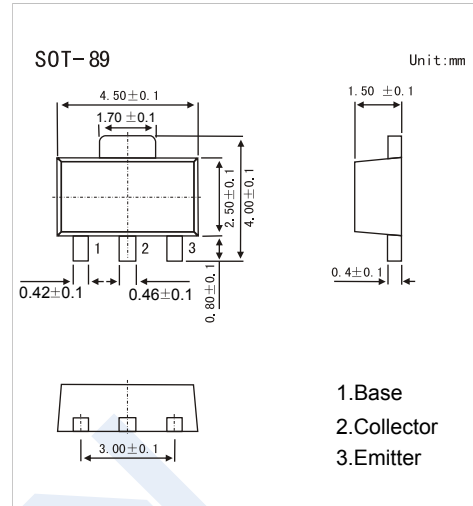


PNP Transistors

2KB4004

■ Features

- Low $V_{CE(sat)}$

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	-40	V
Collector-Emitter Voltage	V_{CEO}	-32	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current (DC)	I_C	-1	A
Single pulse, $P_w=100\text{ms}$		-2	A
Collector Power Dissipation	P_C *	0.5	W
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature Range	T_{stg}	-55 to +150	$^\circ\text{C}$

* When mounted on a 40x40x0.7mm ceramic board.

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

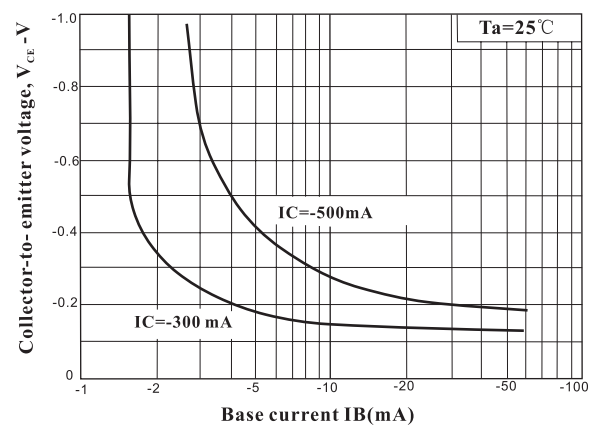
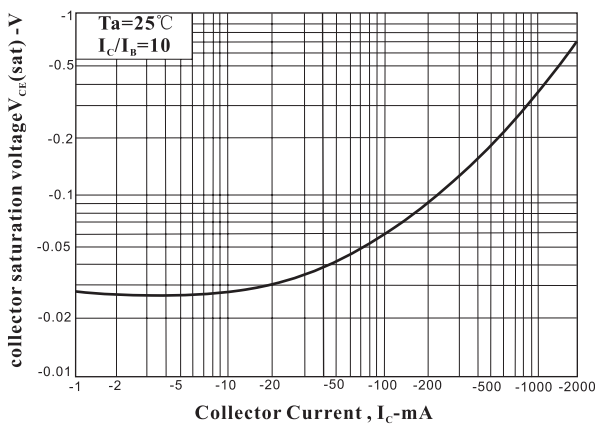
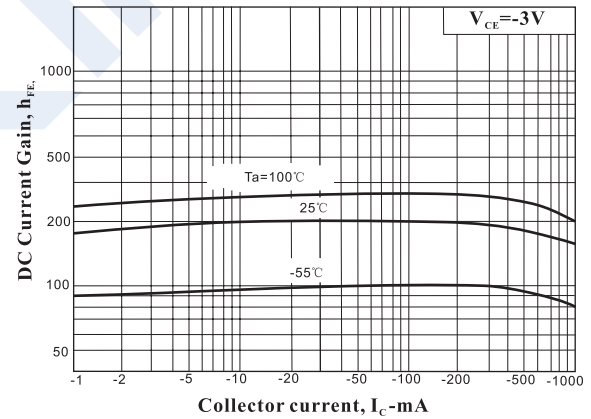
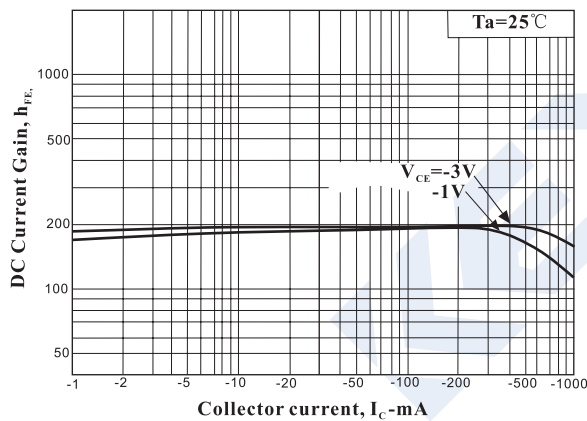
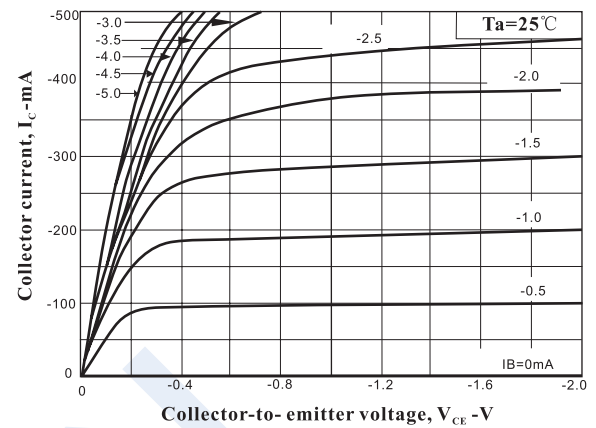
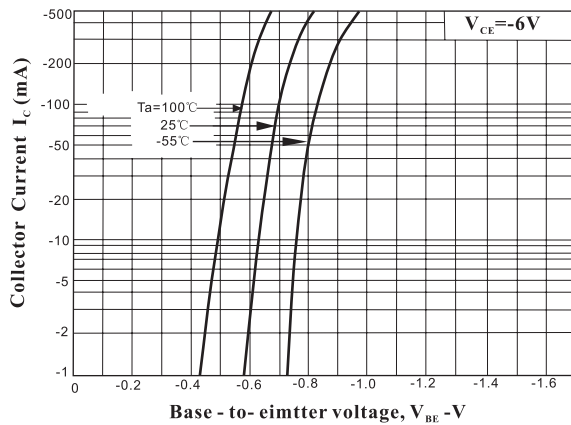
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CBO}	$I_C = -50\mu\text{A}$, $I_E = 0$	-40			V
Collector- emitter breakdown voltage	V_{CEO}	$I_C = -1\text{mA}$, $I_B = 0$	-32			
Emitter - base breakdown voltage	V_{EBO}	$I_E = -50\mu\text{A}$, $I_C = 0$	-5			
Collector-base cut-off current	I_{CBO}	$V_{CB} = -20\text{V}$, $I_E = 0$			-0.5	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -4\text{V}$, $I_C = 0$			-0.5	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -500\text{mA}$, $I_B = -50\text{mA}$		-0.2	-0.5	V
DC current gain	h_{FE}	$V_{CE} = -3\text{V}$, $I_C = -0.1\text{A}$	82		390	
Collector output capacitance	C_{ob}	$V_{CB} = -10\text{V}$, $I_E = 0\text{mA}$, $f = 1\text{MHz}$		20	30	pF
Transition frequency	f_T	$V_{CE} = -5\text{V}$, $I_E = 50\text{mA}$, $f = 30\text{MHz}$		150		MHz

■ h_{FE} Classification

Type	2KB4004-P	2KB4004-Q	2KB4004-R
Range	82-180	120-270	180-390
Marking	BAP*	BAQ*	BAR*

2KB4004

■ Typical Characteristics



2KB4004

■ Typical Characteristics

